

What Is Claimed Is:

1. A method for providing a communication path to a mobile telephony network according to which, to set up a telecommunication connection between a telecommunication terminal (1) designed to be used in a mobile telephony network and a distant terminal, a radio communication (12) (radio path) or a connection (13) that includes the Internet (8) (Internet connecting path) is utilized as connecting path between the telecommunication terminal (1) and the access and switching units (9, 10, 11) of the mobile telephony network, either optionally, i.e., automatically, or initiated by a user of the telecommunication terminal (1), the access and switching units (9, 10, 11) and the telecommunication terminal (1) treating the Internet connecting path (8, 13) like another radio cell of the mobile telephony network as far as the sequences are concerned that are connected to the activation of the telecommunication terminal (1) and its check-in or booking into the mobile telephony network and also as they relate to the switchover of the connecting path between radio path (12) and Internet path (8, 13) or vice versa implemented in a changeover or a handover.
2. The method as recited in Claim 1, wherein the Internet connecting path (8, 13) is set up via an Internet access unit (2), which is able to be networked with the telecommunication terminal (1) in a LAN (Local Area Network), and one of the access and switching units (9, 10, 11) of the mobile telephony network is addressed by the telecommunication terminal (1) via the Internet access unit (2) and the Internet (8) by means of an IP address, the LAN connection of the telecommunication terminal (1) to the Internet access

unit (2) being set up in a conventional fashion, in a wirebound manner, via radio (Wireless LAN-WLAN) or optically, i.e., preferably by infrared transmission (IR-LAN).

3. The method as recited in Claim 1 or 2, wherein the Internet connecting path (8, 13) is routed to a mobile switching unit (MSC - Mobile Switching Center) (9).
4. The method as recited in Claim 2 or 3, wherein, if appropriate, an Internet connecting path (8, 13) existing to an access and switching unit (9, 10, 11) of the mobile telephony network is temporarily routed to a geographically more conveniently located access and switching unit, the IP address stored in the telecommunication terminal (1) during configuration of the system being temporarily modified by the particular access and switching unit (9, 10, 11).
5. The method as recited in Claim 2 or 3, wherein, prior to a communication set-up to one of the access and switching units (9, 10, 11) of the mobile telephony network, a query is made at a server under transmission of information regarding the actual radio area of the telecommunication terminal (1), as a result of which the server transmits to the telecommunication terminal (1) the IP address of an access and switching unit (9, 10, 11) of the mobile telephony network to be addressed preferably.
6. The method as recited in Claim 2 or 3, wherein, if telecommunication connections are set up utilizing the Internet connecting path (8, 13), the access and switching units (9, 10, 11) of the mobile

telephony network change the rate structure for these telecommunication connections.

7. The method as recited in Claim 1 or 2, wherein, as it regards the telecommunication terminal (1), the method allows incoming and outgoing communications to be set up utilizing the Internet connecting path (8, 13), the Internet with the instantaneous Internet address (IP address) and possibly additional address data regarding the telecommunication terminal (1) being stored as location information (LA - Location Area) for the incoming connections in a location register (VLR - Visited Location Register) of the access and switching units (9, 10, 11) of the mobile telephony network.
8. The method as recited in Claim 6, wherein the IP address and the number of the ports used for the communication by means of an Internet protocol (TCP - Transmission Control Protocol, or UDP - User Datagram Protocol) are continuously updated by a cyclical data exchange.
9. The method as recited in Claim 1 or 2, wherein, if in an existing Internet connection (8, 13) quality parameters established for this connection are not attained or an interruption occurs, an automatic switching of the connection to the radio path (12) of the mobile telephony network takes place in that the connection is switched to a radio base station (BSS - Base Station Subsystem) of the mobile telephony network and is routed to the MSC (9) by means of a transmit/receive station (BTS - Base Transceiver Station) (11) of the BSS assigned to the radio cell corresponding to the location of the telecommunication device (1), and

by means of the associated central control device (BSC - Base Station Control) (10), and the VLR is updated accordingly.

10. A system for implementing the method as recited in Claim 1, at least including a telecommunication terminal (1) provided for use in a mobile telephony network; an Internet access unit (2) able to be networked with the telecommunication terminal (1) in a LAN; and an access and switching unit (9, 10, 11) of the mobile telephony network, which is IP-addressable via the Internet (8) and integrated in the infrastructure of a mobile telephony network in which the mobile telecommunication terminal (1) is able to be used.
11. The system as recited in Claim 10, wherein the telecommunication terminal (1) is a TC system having a functional unit for mobile telephony communication.
12. The system as recited in Claim 11, wherein the TC system has a chip-card reader for reading chip cards of a mobile telephony operator.
13. The system as recited in Claim 11 or 12, wherein the TC system is DSL-enabled.
14. The system as recited in one of Claims 10 through 13, wherein, if appropriate, it includes means by which it is signaled to a user of the telecommunication terminal (1) that a less expensive connection than the radio connecting path (12) is available if the Internet connecting path (8, 13) is utilized.
15. A telecommunication terminal (1) for implementing the method as recited in Claim 1, wherein it is designed as mobile telephone which, in

addition to the functional units (7, 15) for the operation in a mobile telephony network, includes a control unit (3) with a memory and means (4, 5, 6) for integrating the device in a LAN, the control unit (3) controlling the switch between different operating modes with respect to an exclusively mobile-telephony-based (mobile telephony operation) or an at least partially Internet-based (Internet operation) telecommunication, and, in Internet operation, the LAN-based data exchange with an Internet access unit (2).

16. The telecommunication terminal (1) as recited in Claim 15,
wherein the means for integration in the LAN is a unit (6) for the wireless or radio-based connection to the LAN (WLAN).
17. The telecommunication terminal (1) as recited in Claim 15 or 16,
wherein the means for integration into the LAN is a unit (5) for the optical in-coupling into the LAN.
18. A telecommunication terminal (1) for implementing the method as recited in Claim 1,
wherein it is designed as laptop which has a network card for the wire-bound or wireless connection to a LAN, a soundcard, and a headset for voice communication and also a chip-card reader for reading chip cards of a mobile telephony operator, and is thus designed at least to utilize the mobile telephony network while establishing a connection (13) routed via the Internet (8).